



CARRIER

MDARC FIELD DAY CALL W6CX?; 2M WR6AHK; 220 WR6ARG; MEMORIAL CALL W6LGW
VOLUME XXVI May 1978 No. 5
THIS IS THE MONTHLY CLUB PAPER OF THE MT. DIABLO AMATEUR RADIO CLUB, INC.
PRESIDENT.....WA6OJT, DICK WEBSTER.....PH. 284-2046
VICE-PRESIDENT.....WA6IRZ, STAN BRINGER.....PH. 890-0989
SECRETARY.....WB6FOA, SALLEY NIKKEL.
TREASURER.....WA6TML, JOHN CLYDE.....PH. 254-7384
EMERGENCY COORDINATOR..W6LKE, DWAYNE ESKRIDGE.....PH. 932-3971
BOARD MEMBER '77 & '78.WA6GBB, BOB MUENCH.....PH. 284-5445
BOARD MEMBER '78 & '79.W6PFW, TED DURST.....PH. 937-1463
Committees: Education Ch. WB6SNW; Door Prize Ch. WB6TZQ; Membership Ch. WB6BIX; TVI Committee K6DQL, K6IMV, N6GQ, K6VLH; Repeater Grp. Ch. WB6PUA; Rptr. Grp. Treas. WB6DHH; Field Day Ch. WA6JUD; Tech. Forum WB6YXT; Publicity WB6JGV; Novice Net WD6CGS with WA6QCZ & WD6APL. The CARRIER folders for April were N6GQ, W6CU & Mildred, WA6JLF & Beth, and WA6KGI. Mail, phone, or give all articles for the Carrier to managing editor typist Hal Mumford, W6CU 1271 Walker Ave. Walnut Creek CA 94596 ph. 934-4728 or Jack Gott, WA6KGI 161 Beverly Dr. P.H. 94523 ph. 682-8774 in Hal's absence.

Meeting Place

The regular monthly meeting of the
MT. DIABLO AMATEUR RADIO CLUB
will be held at our usual place:

GRACE PRESBYTERIAN CHURCH
2100 Tice Valley Blvd., Walnut Creek
May 19, 1978 8 p.m.
"THE THIRD FRIDAY OF THE MONTH"

A Talk
by Bob Chapman
K6WT
on
Electronic Fuel Management
Systems for Aircraft

VISITORS ARE WELCOME

PLEASE DO NOT SMOKE IN THE CHURCH.
PLEASE USE SQUARE FLOWERPOT TYPE
RECEPTACLES OUTSIDE FOR YOUR ASHES

FLASH!

SPECIAL REPEATER GROUP STEERING
COMMITTEE MEETING this Wednesday
17, at Carl's QTH.

SPECIAL REPEATER GROUP GENERAL
MEETING Next Wednesday 24 at the
church 8 p.m.

REMINDERS

Board meets: May 22 8 p.m. at the
QTH of WB6TZQ

Technical Forum: Monday nights
8-9p.m. 21.375MHz

Mt. Diablo Novice Training Net:
8:30 to 9:00p.m. Mondays 21.150MHz
5-8 WPM. Net control WD6CGS w WA6QCZ
& WD6APL.

Field Day: Captains must be
confirmed by Carl immediately. Make
plans now. story inside.

Armed Forces Day: May 20. See
story in this issue.

MDARC MEETING APRIL 21, 1978

Club meeting was called to order by our President Dick Webster, WA6OJT at eight-o-five p.m. Many visitors for the first time were introduced and welcomed. We also had a number of our members up-graded who introduced themselves.

Treasurers report as follows: checking \$1535.14 and savings \$628.77.

Emerg. Coordinator Dwayne Eskridge, W6LKE gave us a good report on his activities. Armed Forces Day will be May 20th. Anyone wishing to help, which will be quite an experience, call Dwayne.

TVI Comm. Lee Hertzburg, K6DQL asked for cooperation on the part of each amateur when he puts his station on the air. To be sure all is ok on the amateurs part. To help keep peace and harmony with ones neighbors to give amateur radio a good name. This will make the TVI Comm. load a lot easier. The TVI Comm. is still in need of a set of "rabbit ears", anyone having or know of a set not in use please notify the TVI Comm.

Membership Chairman Harry Howe, WB6BIX reported as of April 21st 265 members. 55% are ARRL members.

Old Business: A motion made and carried that club allow up to \$100 for Field Day expenses. This will be for Soda water, ice and breakfast. The gasoline will be donated for the generator. What is not used for these purchases will be returned to the treasurer.

Announcement that Novice licenses can be renewed for five years that is if they expire after May 15, 1978. If before, the Novice exam will have to be taken over.

Robert Landing, W6VAE announced that he has been interviewed by a TV station on his windmill ect. That he will be on KPIX chan. 5 this Wed Eve. for ten minutes out of the one hour program April 26th 8-9 pm.

President Dick called for a short break for coffee "And". Later he called the club to order and introduced our Vice-President Stan Bringer, WA6IRZ who gave us a very good program of slides and movies of Pitcairn Island. Thank you Stan

from all of us. We had a very large and courteous crowd. Everyone enjoyed the program. The meeting adjourned at ten-ten pm.

Respectfully Submitted,
Salley Nikkel, WB6FOA
Secretary

MDARC BOARD MEETING APRIL 24, 1978

At the QTH of Dee and Stan Bringer in Concord, President Dick Webster, WA6OJT called the board to order at eight pm. with the following present: WA6IRZ, WB6FOA, WA6GBB, W6PFW, W6CU, WB6TZQ, WB6AEG, WA6JLF, VE2AQV, WB6PUA, K6IMV, N6GQ, and WA6KGI.

Dick gave report in absence of Treasurer as follows: \$628.77 in savings and \$1513.39 in checking. Tax forms have been filed. Treasurers report was accepted.

Minutes of the last board meeting April 3rd. corrected to add three calls who arrived late, they were: W6HOF, K6POU, and W6RVC. Minutes accepted as corrected.

Correspondence: A letter from Israel has been recieved from Bruce Pincus, WB6KNU. Thank you from Edythe Tice, WA6JFW for the planter from the club and the cards sent to her while in the hospital for surgery. "It's a girl" from Ed, WB6ZGD and YL Chris. A card of Congrats. has been sent from the club. Also a card of congratulations to Jo Ann and Ron Miller, WB6JGV "It's a boy" has been sent.

Program Chairman Vice-President Stan, WA6IRZ was complimented by the board on such a fine program he had for the club April 21st. Stan announced that Bob Chapman, K6WT will be the speaker on "Fuel Flow Computers" at the next club meeting May 19th.

It was reported that Jim Presely, WD6CGS novide net control is having a good number of check-ins with traffic passing. Novices please check in, the more the better, you will like it.

Membership Chairman WB6BIX was unable to be present. Dick reported we have 266 members. The board voted to accept all paid up applications for membership.

TVI Comm., all quiet.

board meeting minutes continued.

Door Prize Comm. Hank, WB6TZQ report was alive and well.

Jay Caldis Repeater Chairman, a meeting on May 10th.

Ted Durst Jr. past president gave a report on charitable organization progress.

Old Business: K6IMV turned over the club history compiled by George Kirkman, WA6DKG and typed by YL Noel, to the president.

Hank, WB6TZQ reported a contact with VR6TC, Tom Christian. Tom asked if there were any more recent dated call books than he had. Hank has been appointed to procure a new one and mail it to VR6TC with MDARC's compliments.

The secretary WB6FOA reported that a reservation and deposit of \$50 has been made to the P.H. Rec. Center for the 1978 Christmas party to be on December 17, 1978.

The next board meeting will be at the QTH of Hank, WB6TZQ and YL Corlias Beisheim, 149 Hazel Dr. Pleasant Hill. The June 26th board meeting will be at Warren, WB6AEG and YL Lois Peterson, 1640 Springbrook Rd. Walnut Creek.

Board adjourned at ten-ten pm. Thank you Dee and Stan for the good refreshments.

Respectfully submitted,
Salley Nikkel, WB6FOA
Secretary

THE Mt. DIABLO TRAIL RIDE

April 15, 1978

It began in the early morning with a certain crisp stillness which grew into a period of hustling activity as horses, riders, radiomen, and jeeps organized themselves toward the moment of the trail ride start. The six meter rigs were checked with K6IMV acting as relay and costily ensconced in his Pleasant Hill shack (senior citizens get privileges). Two meters was checked out with that remarkably reliable WR6AHK which always seems to sense when important work is ahead. Those with 220 were testing them in anticipation of finding out if that's the repeater and frequency which can conquer the communications challenges

which that old devil mountain always seems to dredge up.

W6LKE had a base station set up in a corner of the horseman's association building and in the course of the day gave a virtuoso performance operating three separate rigs on three different bands simultaneously in spite of power outages and other complications (eat your heart out NBC!).

And were off! W6PFW in the lead jeep scouting the trail which the riders were to take. Then the trail masters, WA6OJT for the open ride and WA6EKS and W6OAW for the novices (horse type). WA6ADW and WA6OFI were each with one of the Lay Judges (laying in the weeds to spy on rider horsemanship --- there is apparently more to it than just hanging on for dear life). WB6VHW was back and forth with P&R teams (pulse and registration to you tenderfeet) making sure the horses didn't get too tired (nobody checks the riders or the radiomen). The drag position was ably covered by WA6DKG; and W6QEN was all over the route with the Ride Chairman.

It was wet, muddy, beautiful, busy, fun, and exciting to put ham radio to work and have such a test of communication capability. It was also rewarding to see the mountain close up and recovering so well from the fire.

See you in september?

WA6ADW

WINDMILL NOT SHOWN ON TV SHOW

Robert Landing, W6VAE reported to me via a telephone call that the TV coverage that he was supposed to have on KPIX Channel 5 was very misleading due to loss of film on the part of the station. His air time was drastically reduced and the windmill was not shown at all on the program of April 11 as was scheduled and announced at our last club meeting.

WA6KGI

ARMED FORCES DAY MAY 20, 1978

Planning for the 29th annual Armed Forces Day military to amateur cross band test is nearing completion. As in past years, the naval security group at Skaggs Island will be having an open house and will afford use of their facilities to licensed radio operators in this crossband operation.

In order to get to Skaggs Island from the Walnut Creek/ Concord area, take I 680 north across the Martinez Benicia Bridge, (toll charge 40¢). After crossing the bridge bear left towards Valleyjo. Join I80 heading towards Sacramento. Exit to state route #37; this exit goes under I 80 and across the river by Mare Island, headed in a western direction. Proceed from the Valleyjo area along Hwy #37 for "quite a ways". Several miles along this road there will be seen a sign which says, strangely enough, SKAGGS ISLAND. This is a rather small black on white sign, not one of the very large "freeway type" signs. The sign points to a roadway leading off 37 to the right. Show your amateur license to the guard and you will be admitted and advised how to reach building 21 which is your destination.

PLEASE OBSERVE REGULATIONS WHILE AT SKAGGS ISLAND, we are guests of the the Navy. PLEASE observe all vehicle control signs as to speed, restricted areas, and parking. There may be signs saying "DO NOT TRANSMIT". If you see such signs do not use your mobile transmitters. DO NOT BRING ANY of the following: PHOTOGRAPHIC EQUIPMENT, FIREARMS, EXPLOSIVES, DANGEROUS WEAPONS. ILLEGAL DRUGS, or ALCOHOLIC BEVERAGES. Violation could mean confiscation or arrest.

The gate will be open to hams at 0500 hours (5 AM) and you should plan to leave before 2000 hours (8 PM).

Breakfast is available at the Navy Exchange Snack Bar from 0615 to 0900. You will pay for the food. Brunch is 1000 to 1330 and dinner is 1500 to 1630. Vending machines, soft drink machines, and free coffee are available in building 21 for your benefit.

You are invited to bring your own keyers and or receivers if you so desire. If you bring your own receiver, bring a cable equipped with a BNC connector on it for the antenna.

If you can, come stay all day or as long as you like. Operate the big ones. BRING YOUR LICENSE. If you can't come, get on the air and contact NPG from home. Listen on the following frequencies:

FREQUENCY (KHz)	MODE
4001.5	LSB ✓
4005	CW
4010	CW - φ
6989	CW
7347.5	RTTY
7365	CW
13922.5	RTTY
14375	CW
14389	USB
49995	SSB & CW
20983	CW
20998.5	USB

IF YOU INTEND TO GO to Skaggs, please call Dwayne, W6LKE at 932-3971, and leave your name and call so the guard can be notified. This is not mandatory but we do it as a courtesy to the Navy.

YA ALL COME!
W6LKE & WA6KGI

SOMETHING NEW

Information abounds. Carter has been rather inept in handling inflation of one sort, however there is another inflationary trend which we are most happy to accept. We refer to the proliferation of new hams in our county and the large number of them joining us in the MDARC. Mal Vineburg, WD6DUK, Walnut Creek; Dave Patterson, Alamo; Bill Eisinger, WA7NYG/WB6ESM, Concord, yet another P.G.&E.'er, gad there everywhere. Ken Broadus, Walnut Creek; Boyd Borden, Concord; Advian Adkins, WA3NHI, Moroga; Leota M. Hightower, WD6FAD, Concord; there's a ham name for you. Those above with no call listed are shortly expecting one and eager to contribute to the bedlam of the airwaves commonly called QRM. Welcome aboard.

Hank, W6AMH

WR6AHK

This article will appear long after the regular meeting of the repeater has been held. I therefore will not bore you with any more opinions on the recent proposal or what happened. I would like to say that some members feel that I took unfair advantage in giving my opinions in my article in the Carrier. I advised Bob Richter and Wendell Peterson that I was writing article and invited them to do the same. They chose not to do so. I understand that there will be something in this paper.

On May 3, 1978 WR6ACP made the following proposal to the steering committee of the repeater group.

"The WR6ACP repeaters are located on the summit of Mt. Diablo. Since 1972 the WR6ACP repeater group has operated a 24 hour a day open carrier access UHF repeater. This machine is always available. The frequencies are 443.8-448.8 MHz. At this time the WR6ACP group is presenting to the MDARC the use of a VHF 147.66-06 repeater as an alternate and back up machine. WR6ACP is privately owned and will remain so. It will be maintained and operated by the WR6ACP group. There will be no charges to the MDARC or members for the use of the repeater.

All operational costs and maintenance will be borne by the WR6ACP group.

Responsibility for operational techniques and discipline will remain with the MDARC.

Secondary touch tone control is available. This would give MDARC members a choice of either repeater."

Your steering committee worked past midnight discussing this proposal so they could make a recommendation to the group as a whole.

Wendell and Bob did not want to discuss "operational controls". They did state that at the very minimum "to save the frequencies" that it be used once a month to justify the coverage. ACP was asked what their purposes would be if the group voted down the proposal. The answer was: "We will do what is necessary when the time comes to

protect the 66-06 frequencies."

By the time this comes out all will be history and I hope that what ever is decided that everyone can live with it in PEACE.

Jay D. Caldis, WB6PUA

THE MEETING

Last night I attended a MDARC Repeater Group meeting. Many routine things happened. There were financial reports, minutes, old and new business, and the acceptance of new members one of which I am.

A rather not so routine event also took place. The WR6ACP repeater group (a subset of the MDARC group) proposed that the MDARC repeater group have the use of both WR6AHK and WR6ACP, both on 147.66-06 MHz.

This proposal is given word for word in the quote in Jay's letter.

After a great deal of political, imotional, and some technical discussion, the Mdarc repeater group voted via secret ballot to accept the proposal directly. The vote was 24 for and 15 against the proposal.

It was then decided that on May 17 there will be a MDARC repeater group steering committee meeting at Carl Cook's QTH to discuss use and control of the two machines. Then on May 24 there will be a special repeater group meeting to vote on and clarify the proposals made by the steering committee.

WA6KGI

CQ FD CQ FD June 24

Come one come all. Be a band captain. Be an operator. Get in on the ground floor. This year MDARC goes all out teaming up for the sixth time with Carl "Contest" Cook, WA6JUD. This years strategy? Everyone operates and MDARC wins by sheer size.

Band captains will provide the antenna and protection from the sun. Carl provides the generator and power cables. MDARC provides breakfast, gasoline, cool drinks, and 266 operators, yes that means you. Pick your band, grab your key and get truckin'.

contd...

continued.....

If you want to be a band captain call Carl, 685-7987. Captains list will be announced by Carl soon and will be published in the next issue Carrier. Remember, EVERYONE operates this year and we are sure to win. Novices, old timers, CW men alike, get ready for a fun time in the sun. Last one up the hill is a rotten egg.

WA6KGI

Do you remember when WR6AHK was W6CX and on 147.80-147.06????

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Carolyn to 999 Howard Ave.....

From HANK BEISHEIM WB6TZQ

Here is an idea for those of you with synthesized 2 meter rigs. If your rig is capable of going on 145.860 to 145.950 MHz and has electronic switching, you can connect a key across the PTT line and key your rig on CW and work through Oscar 8 (or 7). The signal may chirp a little, but it's not that bad. I have keyed my IC-22S with ten watts to a 4 element beam and have heard my signal come back from the satellite. Unfortunately my access time is very short at the present. My beam is only about 8 feet off the ground and in a fixed position, but I have heard my signal about a 569 or so, not too bad. I hope to put up the full 11 elements atop my tower and then I will be able to rotate the antenna to follow Oscar 8. A verticle such as the Ringo might work as well although the polarization is wrong. Not being up on polarization ect. for Oscar, you ought to be able to make some contacts through Oscar 8. Good luck.

WB6TZQ

See also "Oscar 8" in the April 1978 Carrier, by W6CU.

WA6KGI

HR Report April 21, 1978

THE FCC'S COMPUTER has mistakenly issued duplicate licenses to approximately 3000 new amateurs. Some of those who recieved the dual licenses recieved two call signs, others recieved two licenses with the same call letters. To end the confusion, the FCC has ruled that amateurs with two tickets are to use the license with the latter date, and set aside the one with the earlier date until informed by the FCC what is to be done with it.

Two sets of doubles were mailed out. The first sets are dated February 28 and March 3, the second pairs are dated March 17 and 21. The FCC expects to be in touch by letter with all amateurs who recieved two licenses. The letters should be mailed the week of April 28, and will contain instructions regarding the proper disposition of the extra license.

WANTED: 2 meter handie talkie preferably with touch tone pad.
Call Louis, WA6OCZ 837-1339

WANTED: 4BTV or similar verticle antenna. Call Brad, WA6JYZ
phone 685-3279

WANTED: Model 14 teletype reader for ASR model #19.
John Stobb ph. 458-2921

WANTED: Heavy duty rotor at a very low price. Call Jack, WA6KGI
phone 682-8774

WANTED: EE or well experienced digital and logic technician. Prefer also some supervisory experience. For more info call or write Therry at Precision Founders, 414 Hester St., San Leandro, Ca. 94577
phone (415) 568-6400

STOLEN: Ward's multiband portable radio serial #13249; 2 Superscope CR 800 AM-FM radios; Sharp AM/FM/SW 3 band portable FY 72U #30209861; Commadore Electronic Calculator model GL-997R serial #00993 and AC adaptor; Texas Instruments TI-30 and some other things. If you can help, get in touch with Elayne Smith, WA6TEZ.



THE BASE STATION

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TS 820 919.00
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R 599D Rcvr. 549.00
TR 7400A 2M synthesized 379.00
HT 200 antenna tuner 149.00

YAESU
FT101E 799.00
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FT101EX 699.00
FT227R 2M memorizer 314.00
SP101B speaker 25.00
SP101PB phone patch 64.00
YP150 dummy load 78.00
YC 601 digital display 199.00

TEN TEC
509 Argonaut QRP Xcvr. 369.00
540 Xcvr. 699.00
544 Digital Xcvr 869.00
570 Century 21 CW Xcvr 299.00

MIDLAND
13510 2M synth xcvr Cash 349.00
13509 220 12 channel 159.95
Wilson WE800 synth portable 499.95

Mosley Antennas
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TA40KB 40mtr adptr 88.95

Cushcraft antennas
ATB34 4el tri band 239.95
Hy Quad 2el tri band quad 219.95
Ham III rotor 129.95
T X Rotor Tail Twister 244.95
147-4 4el 2meter 19.95
147-11 11el 2meter 29.95
AR-2 2M Ringo Ranger 32.95
AR-2 2meter ringo 21.95
A220-7 7el 220 21.95
A220-11 11el 220 29.95

Larsen 2M & 220 antennas
Dentron Doublet 10-160 tuner 199.95
Dentron MT2000A tuner 199.95
KW-KAN 1000 watt dummy load 23.95
10" ferrite rod RFI suppress 2.75

USED GEAR
Realistic DX160 rcvr w/spkr 99.95
Collins 75S-3 "mint" w/cw 595.00

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THE BASE STATION

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Concord, CA Phone 685-7388

Weekdays 10-6

Saturdays 10-5

LAST MONTH'S PROBLEM

Given last month's problem and knowing that the amp-hour rating of any given battery changes according to discharge current, I was looking for a formula for this relationship. I found none but I did find that:

$$C = IT.$$

C is discharge rating in amp-hours, T is time in hours and I is current in amps. Since C varies I needed to find a constant that didn't vary. Given a 200 watt-load for 6 hours, (voltage is assumed a constant, $P = IE$ therefore power is directly proportional to current and may be used in its place). C comes out to be 1200 watt-hours and for the 150 watt rig C comes out to be 1800 watt-hours. As expected C is not constant. I did notice that if I subtracted 100 times the discharge time I always got 600 which was a good constant. Knowing all that, my final formula is:

$$\frac{600}{T} = 100 \frac{P}{T}$$

where T is discharge time in hours and P is rig power in watts. Plug in 24 for T and you get 125 watts for rig power.

— . . . —

THIS MONTH'S PROBLEM

For this one you need no more than high school math.

A ham looks into a water puddle where he can see the reflection of the top of his newly erected tower. His eye level is 5 feet from the ground. He is standing 27 feet from the tower which is 24 feet from the puddle. How tall is his tower???

de WA6KGI

— . . . —

See page 79 of the April QST for a picture of Carl Cook, WA6JUD in his new shack. Looks good, Carl

W6CU & WA6KGI

Mt. Diablo Amateur Radio Club Inc.
P.O. Box 23222
Pleasant Hill, Calif. 94523

Affiliated with the ARRL
Affiliated with the American Red Cross
Member: Amateur Radio News Service

FIRST CLASS

Cassette tapes of the Carrier are being made for WA6EKS, WA6TAS & WD6EXI. The Carrier was mailed May 13, 1978

Distribution:

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